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## PATENT SPECIFICATION

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## DRAWINGS ATTACHED

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GREAT BRITAIN GROUP. CLASS\_ RECORDED



## (54) IMPROVEMENTS IN OR RELATING TO THIN-WALLED RUBBER ARTICLES

We, L. R. INDUSTRIES LIMITED a British Company (formerly known as London Rubber Industries Limited) North Circular Road, Chingford, London E.4 (formerly of Hall Lane, Chingford, London E.4.) do hereby declare the invention for which we pray that a patent may be granted to us, and the method by which it is to be performed, to be particularly described in and by the following statement:

Contraceptive sheaths normally have a main body section of uniform circular cross-section, which fits over the shaft of the penis; this body section leads into an end section, of blunt or teat contour, which closes the sheath. The other end of the sheath is open. The sheaths are normally made by dipping of a correspondingly shaped former into rubber latex, or rubber solution as is well known to those skilled in the art, the resultant sheath having a thin wall of uniform thickness.

Various proposals have been made at times to coat the inside surface of the sheath with a suitable lubricant in order to improve sensation, but this adds to the expense and complication of manufacture.

It is accordingly a main object of the present invention to provide a contraceptive sheath by which improved sensation can be obtained without the need for any artificial treatments of the sheath, but by alteration in the shape of the sheath.

According to the present invention there is provided a thin-walled rubber contraceptive sheath a head section and a main body section, both of generally cylindrical shape and circular cross section, wherein the diameter of the head section is substantially larger than that of the main body section, and its length does not exceed that of the main body section.

This new configuration permits advantage to be taken in a particularly simple and convenient manner of the fact that different portions of the penis are sensitive to different types of stimulation, and hence contribute in different ways to the overall erotic sensation, [Price 25p]

Thus it has been found that the base of the shaft is sensitive to pressure whilst the head of the penis from just behind the coronal sulcus to the meatus is primarily sensitive to friction and temperature. The intermediate portion of the penis, between the coronal sulcus and shaft base is relatively insensitive.

The employment of two distinct sections enables on the one hand gripping of the swollen head of the penis, when in erect state, to be avoided whilst simultaneously providing a tight grip around the root of the penis. Additionally the gripping of the stem section around substantially the whole length of the shaft of the penis provides a degree of sealing against the escape of seminal fluid comparable to that obtainable with a conventional sheath of uniform tubular cross-section.

Figures 1 and 2 of the accompanying drawing illustrate two preferred embodiments of the present invention.

In the embodiment illustrated in Figure 1 a sheath indicated generally at 1 is formed successively from the open end towards the closed end, with a tubular stem section 2 of 94 mms length and 30 mms diameter, an approximately frusto-conical connecting section 3 of 33 mms length and diameter increasing from 30 mms to 46 mms along its length, a tubular head section 4 of 26 mms length and 46 mms diameter and a final teat-type end closing section 5. The open end of the sheath is formed with a bead 6 as usual.

In the embodiment illustrated in Figure 2, the head section is somewhat shorter and the stem section 2 correspondingly longer; the stem section is also somewhat wider than in the embodiment of Figure 1. Specifically the tubular stem section 2 is of 119 mms length and 35 mms diameter, the tubular head section 4 is of 12 mms length and 45 mms diameter and the frusto-conical connecting section 3 is of 21 mms length increasing in diameter from 35 to 45 mms along its length. The sheath is closed again by a teat-type end closing section 5.

Thus in these embodiments the ratios of

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head section diameter: stem section diameter and stem section length: head section length are 1.53: 1 and 3.62: 1 respectively, in the case of the sheath illustrated in Figure 1, and 1.29 : 1 and 9.92 : 1 respectively in the case of the sheath illustrated in Figure 2.

More generally, the ratio of the head section diameter: stem section diameter will usually be in the range of 1.8 : 1 to 1.1 : 1 and the ratio of stem section length: head section length is preferably in the range of 12: 1 to 1:1.

The present sheaths can be made on existing dipping machinery, the only alteration necessary being in the configuration of the former. The former configuration has to be complementary to that of the sheath, since the sheath is created by deposition of the latex or rubber solution on the external surface of the former.

WHAT WE CLAIM IS:-

1. A thin-walled rubber contraceptive sheath comprising a head section and a main body section, both of generally cylindrical shape and circular cross section, wherein the diameter of the head section is substantially larger than that of the main body section, and its length does not exceed that of the main body section.

2. A contraceptive sheath according to claim 1 wherein the main body and head sections are inter-connected by a tapered section.

3. A contraceptive sheath according to claim 1 or 2 wherein the ratio of the diameters of the head and main body sections is in the range 1.8 : 1 to 1.1 : 1.

4. A contraceptive sheath according to claim 1, 2 or 3 wherein the ratio of the lengths of the main body and head sections is in the range 12: 1 to 1: 1.

5. A contraceptive sheath according to claim 1 substantially as herein described with special reference to the accompanying drawings.

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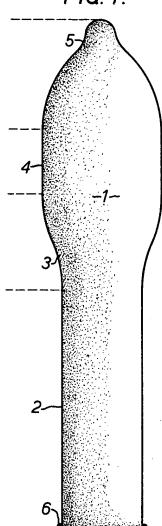
COMPLETE SPECIFICATION

2 SHEETS

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Sheet 1

FIG. 1.



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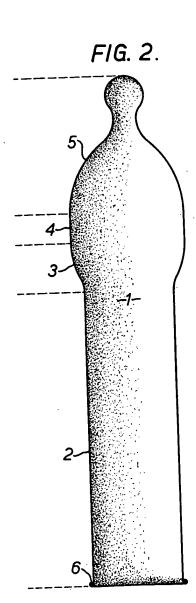
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Sheet 2



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